

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1-20. (cancelled)

21. (currently amended) A method of cementing an oil or gas well, the method comprising:

providing a cement composition comprising water, cement, and low reactivity particles, wherein the low reactivity particles have a size of about 40 mesh to about 250 mesh, and wherein the low reactivity particles are present at a concentration of about 30 weight percent to about 100 weight percent, based on the weight of the cement;

pumping the composition into the oil or gas well; and

allowing the composition to set[[:]],

wherein the composition fractures in a non-linear manner when set interfacial transition zones are formed around the low reactivity particles for non-linear fractures to form between particle boundaries.

22. (cancelled)

23. (original) The method of claim 21, wherein the water is present at a concentration of about 30 weight percent to about 150 weight percent, based on the weight of the cement.

24. (previously presented) The method of claim 21, wherein the cement is selected from the group consisting of API Class A cement, API Class B cement, API Class C cement, API Class G cement, and API Class H cement.

25. (previously presented) The method of claim 21, wherein the cement is selected from the group consisting of ASTM class I cement, ASTM class II cement, ASTM class III cement, ASTM class IV cement, and ASTM class V cement.

26. (original) The method of claim 21, wherein the particles are silica sand.

27. (previously presented) The method of claim 21, wherein the particles are selected from the group consisting of aluminum silicate, gilsonite, ground coal, adamantane, and fullerene.

28. (cancelled)

29. (original) The method of claim 21, wherein the composition further comprises sand.

30. (original) The method of claim 21, wherein the composition further comprises gravel.

31-40. (cancelled)

41. (new) The method of claim 21, further comprising a dispersant, a salt, a set retarder, a gas control agent, a free fluid control agent, a biopolymer, a weighting material, a fluid loss agent, a bonding agent, an extender, a reinforcing agent, or a gel.

42. (new) The method of claim 41, wherein the weighting agent is hematite.

43. (new) The method of claim 41, wherein the fluid loss agent is a hydroxyethylcellulose and AMPS copolymer.

44. (new) The method of claim 41, wherein the bonding agent is polyvinyl alcohol.

45. (new) The method of claim 41, wherein the extender is sodium montmorillonite, sodium metasilicate, or sodium silicate.

46. (new) The method of claim 41, wherein the reinforcing agent is wollastonite, pyrophyllite, sepiolite, carbon whiskers, polypropylene whiskers, or nylon whiskers.